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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,875	11/26/2003	Katsuya Watanabe	10407-72US (A3083MT-US1)	1707
570 7590 05/07/2007 AKIN GUMP STRAUSS HAUER & FELD L.L.P. ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103			EXAMINER PATEL, GAUTAM	
			ART UNIT 2627	PAPER NUMBER
			MAIL DATE 05/07/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/722,875	WATANABE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Gautam R. Patel	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>11/26/03</u>  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-13 are pending for the examination.

#### **Election/Restriction**

2. None of the claims are withdrawn from further consideration by the examiner, 37 C.F.R. § 1.142(b) as being drawn to non-elected embodiments at this time. Election was made with traverse of claims 1-13.

Applicant's election with traverse of group A in Paper dated 3/5/07 is acknowledged.

The traversal is on the ground(s) that "spies I and II are within same art and Examiner should state why species are different!".

- a. This is not found persuasive because, the Examiner does not need to show separate classification or field of search for election of the species requirement. See 803.00 and 808.01(a); M.P.E.P.
- b. More importantly MPEP § 806.04(e) clearly states that species are always the specifically different embodiments.
- c. Also it is the Applicants themselves has defines these two figures as two different species.
- d. To advance the prosecution for time being restriction requirement is removed, in light of the Applicant's arguments that species b. corresponds to not only figs. 11-19 but also to figs. 2-10

The requirement is still deemed proper and is therefore made **FINAL**.

#### **Priority**

2. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file.

#### **Specification**

3. The disclosure is objected for following reasons.  
The title of the invention is neither precise nor descriptive. A new title is required which should include, using twenty words or fewer, claimed features that differentiate the invention .

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from the Prior Art. It is recommended that the title should reflect the gist of or the improvement of the present invention.

Correction is required.

### **Claim Objections**

4. Claim 13 is objected for following reasons.

The preamble [which does not breadth life into the body of the claim] generates confusion by refereeing to structure of the optical disc drive. Thus making the claim hybrid by claiming both an apparatus and a tangible computer readable storage medium producing steps.

Corrections are required.

### **Claim Rejections - 35 U.S.C. § 102**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-13 are rejected under 35 U.S.C. § 102(e) as being anticipated by Tada et al., US. patent 6,370,093 (hereafter Tada).

As to claim 1, Tada discloses the invention as claimed [see Figs. 4-5, 7, 13-14, 18] including a light source, a focusing section, a focus shifting section, a light receiving section, a focus error signal generating section and a control section, comprising:

a light source [fig. 5, unit 31];

a focusing section [fig. 7, unit 46a] for focusing light emitted from the light source;

a focus shifting section [fig. 7, unit 46] for shifting the focal point of the light by changing the position of the focusing section perpendicularly to a data storage layer of a given optical disc in accordance with a control signal;

a light receiving section [fig. 7, unit 43] for receiving, at multiple areas, the light reflected from the data storage layer and generating light quantity signals representing quantities of the light received at the respective areas;

a focus error signal generating section [fig. 7, unit 46] for generating a focus error signal based on the light quantity signals; and

a control section [fig. 7, units 46 & 47] for generating the control signal in response to the focus error signal such that the focal point of the light is transferred to a focus controllable range in which a focus control is able to be performed on the data storage layer, wherein the control section generates the control signal such that the focal point of the light being shifted toward the data storage layer is decelerated initially at a first acceleration [Vbrk1] and then at a second acceleration [Vbrk2], the absolute value of the second acceleration being smaller [fig. 14C] than that of the first acceleration [col. 12, line 46 to col. 13, line 23; col. 15, lines 36-55].

6. The aforementioned claim 2, recites the following elements, inter alia, disclosed in Tada:  
the control section generates the control signal such that the focusing section is brought away from the optical disc and that the focal point stops shifting once entered the focus controllable range [col. 15, lines 36 to col. 16, line 35].

7. The aforementioned claim 3, recites the following elements, inter alia, disclosed in Tada:  
the control section generates the control signal such that the focusing section is brought toward the optical disc until the focal point of the light passes the focus controllable range and then brought away from the optical disc once the focal point has passed the focus controllable range [col. 15, lines 36 to col. 16, line 35].

8. The aforementioned claim 4, recites the following elements, inter alia, disclosed in Tada:  
the control section generates the control signal such that until the focal point of the light passes the focus controllable range, the focal point being shifted is decelerated at the first acceleration and then at the second acceleration, and that once the focal point has passed the focus controllable range, the focal point stops shifting [col. 15, lines 36 to col. 16, line 35].

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9. The aforementioned claim 5, recites the following elements, inter alia, disclosed in Tada:  
the control section generates the control signal such that the focal point of the light being shifted is decelerated at the first acceleration and then stops shifting once and that the focal point starts being shifted again in the same direction and then decelerated at the second acceleration [col. 15, lines 36 to col. 16, line 35].

10. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Tada:  
the optical disc has a plurality of data storage layers [fig. 2], and wherein the control section generates the control signal such that the focal point of the light being shifted from one of the plurality of data storage layers, for which the focus control is performed, toward the data storage layer [col. 15, lines 36 to col. 16, line 35].

11. The aforementioned claim 7, recites the following elements, inter alia, disclosed in Tada:  
the focus shifting section changes the position of the focusing section in response to a train of pulses applied thereto, and wherein the control signal generated by the control section includes a first type of pulses [fig. 14B] that increases the acceleration and a second type of pulses that decreases the acceleration [fig. 14C] [col. 15, lines 36 to col. 16, line 35].

12. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Tada:  
the focus shifting section changes the position, acceleration and velocity of the focusing section according to the numbers, magnitudes and durations of the first and second types of pulses applied [fig. 14B 18B, 18C], and wherein the control section generates the control signal by adjusting at least one of the numbers, magnitudes and durations of the first and second types of pulses applied [col. 15, lines 36 to col. 16, line 35].

13. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Tada:  
the control section suspends the focus control on the data storage layer while generating the control signal [col. 15, lines 36 to col. 16, line 35].

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14. The aforementioned claim 10, recites the following elements, inter alia, disclosed in Tada:

the control section starts the focus control after having transferred the focal point to the focus controllable range [col. 15, lines 36 to col. 16, line 35].

15. The aforementioned claim 11, recites the following steps, inter alia, disclosed in Tada:

the method comprises the steps of: (a) generating a first control signal in response to the focus error signal and supplying the first control signal to the focus shifting section such that the focal point of the light being shifted toward the data storage layer is decelerated at a first acceleration; and (b) generating a second control signal and supplying the second control signal to the focus shifting section after the step (a) such that the focal point of the light is decelerated at a second acceleration and that the absolute value of the second acceleration is smaller than that of the first acceleration [col. 15, lines 36 to col. 16, line 35].

16. As to claim 12, it is rejected for the similar reasons set forth in the rejection of claim 1, above. As to the added limitations Tada discloses: a first shifting control section for generating a control signal in response to the focus error signal and supplying the control signal to the focus shifting section such that the focal point of the light being shifted toward the data storage layer is decelerated at a first acceleration; and

a second shifting control section for generating another control signal and supplying the control signal to the focus shifting section such that the focal point of the light is decelerated at a second acceleration and that the absolute value of the second acceleration is smaller than that of the first acceleration [col. 12, line 46 to col. 13, line 23; col. 15, lines 36 to col. 16, line 35].

NOTE: Since unit 46 performs these both functions it inherently has these sections within it.

17. The aforementioned claim 13, recites the following steps, inter alia, disclosed in Tada:

generating a first control signal in response to the focus error signal and supplying the first control signal to the focus shifting section such that the focal point of the light being shifted toward the data storage layer is decelerated at a first acceleration; and (b) generating a second control signal and supplying the second control signal to the focus shifting section such that the

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focal point of the light is decelerated at a second acceleration and that the absolute value of the second acceleration is smaller than that of the first acceleration [col. 12, line 46 to col. 13, line 23; col. 15, lines 36 to col. 16, line 35].

#### Other prior art cited

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Liu et al. (US. Patent 6,775,208) "**Method for controlling the focus speed of a pickup head..**".
- b) Kobayashi (US. patent 7,145,842) "Objective lens moving control method and apparatus".

#### Contact information

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2600) where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dwayne Bost, who can be reached on (571) 272-7023.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.



GAUTAM R. PATEL  
PRIMARY PATENT EXAMINER

Gautam R. Patel  
Primary Examiner  
Group Art Unit 2627

May 2, 2007